

IN THE CLAIMS:

Please AMEND claims 1, 3-8, 13-16, and 18-19; CANCEL claims 2, 5-6, 10-12, and 17 without prejudice or disclaimer; and ADD new claims 20-32 as follows.

1. (Currently Amended) A method, ~~of controlling communication resources, the method comprising:~~

~~monitoring a first network element for~~ an indication of future need of communication resources in ~~a~~the first network element; ~~sending the indication from the first network element to a controller~~, wherein the indication ~~is~~comprises a coded value of a length of a data queue in the first network element;

~~controlling the communication resources between the first network element and a second network element based on this indication~~; and

~~controlling allocating the communications resources in~~for a transmission from between the first network element ~~to the~~and a second network element based on the indication, ~~wherein the communication resources are allocated by the controller~~.

2. (Cancelled)

3. (Currently Amended) The method according to claim 1, wherein ~~in the sending, the indication includes~~comprises information about a transmit buffer of the first network element.

4. (Currently Amended) The method according to claim 1, wherein ~~in the sending~~, the indication ~~includes~~ comprises information on the additional resources needed by said first network element.

5-6. (Cancelled)

7. (Currently Amended) The method according to claim 1, wherein ~~in the monitoring~~, the first network element is a mobile station and the second network element is a base station of a wireless communication network.

8. (Currently Amended) A system, ~~for controlling communication resources in a network, the system comprising:~~

a plurality of first stations;

a second station connected to the plurality of first stations through a plurality of communication links;

a controller configured to control the allocation of the communication resources among the communications links, the controller being separate and independent from the first stations,

said allocation being performed in accordance with information transmitted from the first stations, ~~which indicates a need for communication resources based upon lengths wherein the information comprises a coded value of a length of a data queues~~

~~queues in each of the first stations, wherein the information is a coded value of the lengths of the data queues.~~

9. (Previously Presented) The system according to claim 8, wherein said controller is part of a base station.

10-12. (cancelled).

13. (Currently Amended) The system according to claim 8, wherein each of said first stations transmits a transmission comprising a plurality of data blocks, and wherein the coded value of the length of a data queue of one of the first stations is provided in each of said data blocks in the transmission associated with said one first station ~~said indication is provided for each data block transmitted~~.

14. (Currently Amended) A base station An apparatus, comprising:

~~a receiver;~~

~~a decoder configured to decode a code representative of a length of a data queue in at least one mobile station; and~~

~~a controller configured to control allocation of communication resources for at least one mobile station, wherein said decoder provides the allocation is based upon received queue length information for the at least one mobile station to the controller.~~

15. (Currently Amended) An apparatus, A mobile station comprising:

- a data generator;
- a data queue, configured to receive data packets from the data generator;
- an encoder configured to encode a code representative of a length of the data queue; and
- a transmitter configured to transmit data with said code included therein as a field.

16. (Previously Presented) The method according to claim 1, wherein the monitoring comprises receiving data packets and wherein sending step further comprises sending each of the data packets comprise the indication of the length of the data queue is sent in every packet.

17. (Cancelled)

18. (Previously Presented) The base station apparatus according to claim-14_26, wherein the decoder receives a plurality of data packets and each of said data packets comprises said queue length information indication is received by the decoder in each data packet.

19. (Currently Amended) The ~~mobile station apparatus~~ according to claim 15, wherein said data comprises a plurality of data packets, and wherein each of said data packets comprises said code. ~~the transmitter is further configured to transmit the indication in each data packet that is transmitted from the transmitter.~~

20. (New) An apparatus, comprising:

decoder means for decoding a code representative of a length of a data queue in at least one mobile station; and
controller means for controlling allocation of communication resources, wherein said decoder means provides queue length information for the at least one mobile station to the controller.

21. (New) An apparatus, comprising:

data generator means for generating data;
data queue means for receiving data packets from the data generator means;
encoder means for encoding a code representative of a length of the data queue means; and
a transmitter means for transmitting data with said code included therein as a field.

22. (New) A method, comprising:

generating data;

encoding a code representative of a length of a data queue in a first network element, wherein the data queue is configured to receive the generated data; and

transmitting data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element.

23. (New) The method according to claim 22, wherein the code further comprises information about a transmit buffer of the first network element.

24. (New) The method according to claim 22, wherein in wherein the code further comprises information on additional resources needed by said first network element.

25. (New) The method according to claim 22, wherein the first network element is a mobile station and the second network element is a base station of a wireless communication network.

26. (New) The apparatus according to claim 14, further comprising:

a decoder configured to:

decode a code representative of the queue length information for each of the at least one mobile station, and

provide said queue length information for each of the at least one mobile station to the controller.

27. (New) The apparatus according to claim 14, wherein the code comprises information about a transmit buffer for each of the at least one mobile station.

28. (New) The apparatus according to claim 14, wherein the code comprises information on the additional resources needed by each of the at least one mobile station.

29. (New) The apparatus according to claim 15, wherein the code further comprises information about a transmit buffer for the apparatus.

30. (New) The apparatus according to claim 15, wherein the code further comprises information on additional resources needed by said apparatus.

31. (New) A computer-readable medium having computer-executable components comprising:

monitoring a first network element for an indication of future need of communication resources in the first network element, wherein the indication comprises a coded value of a length of a data queue in the first network element; and

allocating the communications resources for a transmission between the first network element and a second network element based on the indication.

32. (New)) A computer-readable medium having computer-executable components comprising:

generating data;

encoding a code representative of a length of a data queue in a first network element, wherein the data queue is configured to receive the generated data; and

transmitting data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element.